ISSUING PERMITS

for the

MOVEMENT of PLANT PESTS, PATHOGENS, and VECTORS

PA-967
AGRICULTURAL RESEARCH SERVICE
U.S. DEPARTMENT OF AGRICULTURE

FOREWARD

Regulations administered by the U.S. Department of Agriculture affect the movement of plant pests, pathogens, and vectors. These regulations are necessary to protect American agriculture. They are designed to prevent the entry of new pest organisms into the United States and its possessions from foreign areas and to prevent their spread within the Nation. The regulations, therefore, are concerned with any movements into the United States or its Territories, as well as between points within the national boundaries.

Each request to transport plant pests, pathogens, and vectors is individually evaluated, and the safeguards established for the specific pest organism involved. This guide has been prepared for use as a reference concerning the factors that are considered when reviewing requests for the movement of plant pests, pathogens, and vectors.

CLASSES OF PEST ORGANISMS AND POTENTIAL PEST ORGANISMS

Each request for a permit must be evaluated separately to determine which factors apply to the particular pest species involved. Plant pest species may be broadly grouped into the following five classes:

Class I
Domestic pests of known economic importance distributed throughout their ecological range in the United States:

Generally, movement of pests of this class would be permitted if *minimal* safeguards appropriate to the particular pest are observed to prevent escape.

Class II
Domestic pests of known economic importance not distributed throughout their potential range:

For most pests in this class, movement would be allowed if *all* applicable safeguards for preventing escape of the particular pest species are observed.

Class III
Pests subject to Federal-State co-operative domestic quarantines (other than those

included in Class IV) and foreign pests of minor importance:

Generally, the movement of pests of this class would be allowed *only* if the movement would further plant protection activities or if other special circumstances warrant issuance of a permit. All applicable safeguards necessary to prevent escape of the particular pest species must be observed.

Class IV
Foreign pests of major importance and introduced species of major importance confined to a limited geographical area:

As a general policy, the movement of foreign and introduced pests of major importance would not be allowed except under special circumstances. If the movement of a pest in this category is allowed, all safeguard requirements applicable to the pest organism must be adhered to strictly to prevent any escape.

Class V
Potential pests or nonpest organisms:
a. *Insect enemies of noxious plants:*

Until it can be determined that they are not potentially injurious, movement of insect enemies of noxious plants would be permitted *only* if safety requirements to prevent their escape are met.

b. *Insect pollinators:*

Movement of insect pollinators would be permitted *only* if adequate safeguards are observed to eliminate parasites, and to prevent escape of the pollinators until adequate knowledge is available to assure that none of the insect pollinators is potentially injurious.

c. *Parasites, predators, and pathogens of plant pests:*

Movement would be permitted *only* if necessary safeguards are observed to eliminate hyperparasites, and to prevent escape of parasites, predators, and pathogens of plant pests until sufficient knowledge is available to be sure that none is potentially injurious.

BASIC FACTORS TO CONSIDER BEFORE PERMITS ARE ISSUED

Prior to issuing a permit, the following factors should be considered:

1. Known or potential economic importance of the organism.
2. Present known distribution of the organism.
3. Survival potential of the organism in the test area in the event of accidental escape.
4. Location of the test facility in relation to hosts of the pest.
5. Possibility of conducting research in areas where the pest occurs.
6. The race or strain to be studied in relation to other races or strains of the same pest in the test area (e.g., a boll weevil from a foreign country that may be of a different strain from ones in this country).
7. Value of the information to be gained from the research weighed against the possible pest risk.
8. The possiblity of substituting other less harmful plant pests to obtain the desired research information.
9. The possibility of obtaining the pest in areas where the disease is not known to occur in cases where the pest is a vector of a disease.
10. Mobility of the organism.
11. Knowledge of procedures that could be used to eradicate an organism in case of an accidental escape.
12. Agreement by the individuals requesting a permit that they will abide by all stipulations.
13. In cases involving pathogens, the kind and manner of research or use contemplated (e.g., laboratory and greenhouse versus field trials).
14. The possibility of and the advisability of the organism being moved to other locations as part of the cooperative project.

SAFEGUARDS TO BE ESTABLISHED IF MOVEMENT IS TO BE PERMITTED

If the movement of plant pests, pathogens, or vectors is to be allowed, an itemized list of safeguards required to minimize or eliminate the possibility of escape must be provided. Before the permit is issued, the permitee must agree in writing that he will abide by the prescribed safeguards. The safeguards will vary depending upon pest species, as well as the origin and

destination of the shipment. Safeguards will include some combination of the following:

1. *Shipping containers*

a. *Arthropods*

(1) The inner container and packing material shall be destroyed by incineration or autoclaving.

(2) The outer container shall be of metal construction and be cleaned thoroughly after shipment.

(3) If a metal container cannot be used because of adverse effects on the organism, the container shall be doublewalled with an inner container of wood surrounded by excelsior or paper packing in a wooden or heavy cardboard box. The outer box shall be enclosed in finely woven, heavy cloth or canvas, the seams of which shall be sewn or otherwise securely sealed.

b. *Pathogens*

A container within a container shall be prescribed for the shipment of such pathogenic material as cultures, nematodes, host material, and soil. Both containers should be of sturdy construction and capable of being sealed.

Cultures requiring maximum security shall be shipped in containers of the following type:

(1) The outer container with screwcap lid shall be a cylindrical mailing tube made of heavy duty cardboard or its equivalent.

(2) The inner container shall be of metal construction and capable of being sealed.

(3) The ampul containing the organism shall be sealed inside a five mil plastic envelope and protected inside the metal container by adequate packing material.

2. *Type of facility*

a. *Arthropods*

(1) Anteroom entryway with doors of insect-proof design.

(2) Provision for shower room and change of clothes.

(3) Insect- and rodent-proof floors, walls, ceilings, and windows.

(4) Sealed electrical system, including floor plugs, switches, and lights.

(5) Insects and other pest species confined to cages within the quarantine facility. Cages should not be overcrowded because overcrowding will increase restlessness and chance of escape.

(6) Heating and exhaust system, preferably a closed-air system, fitted with adequate filters.

(7) Plumbing system, including screens in floor drains and other drainlines.

(8) Pressurized air system—positive pressure in noncontainment areas; negative pressure in containment areas.

(9) Access of autoclave or incineration system to containment area—preferably the system is available through a sealed exit direct from containment room.

(10) Access to facility limited to workers assigned to the program.

(11) Traps effective against the pest species placed in anteroom if information on constructing or obtaining such traps is available.

b. *Pathogens*

(1) Concrete floors with drains.

(2) Raised benches.

(3) Double door air lock.

(4) Screened vents (30/30 or better mesh copper or saran).

(5) Soil sterilization.

(6) Steam sterilization facilities.

(7) Service and laboratory facilities in the same building.

(8) Fungicide and insecticide spray programs.

(9) Access to facility limited to workers assigned to the program.

3. *Personnel assigned to the research program*

The permitee is responsible for the confinement of the pest species. He is further responsible that any workers authorized to enter the containment area handle the pest organism in a manner to prevent escape. The permitee is also responsible for the collection and shipment of the specimens in such a manner as to prevent their escape during transport.

4. *Checks on the operation by the permitting agency*

a. Preauthorization inspection to check on compliance with minimum requirements.

b. Periodic checks on the operation while in process.

c. Check on and document destruction of specimens for protection of research workers and personnel of the permitting agency. When only

a limited number of specimens are involved for a short period of time, the actual number received and destroyed shall be documented.

5. *Eradication procedures*

Specify the eradicative procedures to be applied in the event of accidental escape.

6. *Duration of tests*

Indicate the contemplated duration of the study or test.

FOR INFORMATION

A brief resume of the regulations governing the shipment of living plant pests, pathogens, and vectors is given in PA-873, "Regulating the Shipment of Living Pests, Pathogens, and Vectors." Additional information also may be obtained concerning these guidelines from local representatives of the Plant Protection Division or the Plant Quarantine Division of ARS, or from the national offices of these divisions, ARS-USDA, Federal Center Building, Hyattsville, Maryland 20782.

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